PRINCIPLES OF BACTERIOLOGY AND IMMUNITY PRINCIPLES OF BACTERIOLOGY AND IMMUNITY (Topley and Wilson's—Fifth Edition in Two Volumes, Volume I and II—Sir Graham S. Wilson, M.D., LL.D., F.R.C.P., D.P.H., formerly Director of Public Health Laboratory Service, England and Wales; and A. A. Miles, C.B.E., M.D., F.R.C.P., F.R.S., Professor of Experimental Pathology, University of London, and Director of the Lictor Letting of Properties Medicine London, With the Lister Institute of Preventive Medicine, London. With the Lister Institute of Preventive Medicine, London. With the help of R. Knox, M.D., F.R.C.P.; A. D. Macrae, M.D., Dip. Bact.; M. T. Parker, M.D., Dip. Bact.; G. G. Meynell, M.D.; and Elinor W. Meynell, M.B., B. Ch., B.A.O., Dip. Bact. The Williams & Wilkins Company, Baltimore, Md., exclusive U.S. agents, 1964. Volume I—1,191 pages, plus index of 53 pages; and Volume II—1,370 pages, plus index of 53 pages; \$35.00 for both volumes.

Thirty-five years ago the first edition of this venerable text contained virtually all available knowledge in Bacteriology and Immunology, in an admirable, balanced presentation. Since World War II the enormous increase in both theoretical and applied knowledge and the vast number of significant publications, have made it virtually impossible to review in a single book comprehensively and in specific detail the rapidly moving fields of immunology, virology, molecular biology, genetics, and all the other specialties of microbiology. The authors recognize this dilemma, but valiantly persist in their effort to have ONE book cover the entire enormous field. They have succeeded remarkably well. The fifth edition, like the first, is a classic of thoughtful, well-informed compilation and documentation. Naturally, the book has become bulky in spite of small print. Very few American physicians or medical students are likely to read all 2,600 pages of the two volumes, but they will find it an excellent detailed reference work, with a wealth of interesting and useful correlations. The book is directed most clearly at bacteriologists, public health workers or epidemiologists, less at physicians concerned with infectious disease. The term "fever" does not appear in the otherwise good index. This reviewer must admit that he has not had the time or strength to read the entire 2,600 pages. However, perusal of limited sections yielded a surprising amount of up-to-date well-integrated information and carefully considered opinion. This book is a must for those who can use it to good advantage.

ERNEST JAWETZ, M.D.

CLINICAL TOXICOLOGY—Fourth Edition—Clinton H. Thienes, M.D., Ph.D., F.A.C.P., Emeritus Director, Institute of Medical Research, Collis P. and Howard Huntington Memorial Hospital, Pasadena; Emeritus Adjunct Professor of Pharmacology and Toxicology, School of Medicine, University of Southern California, Los Angeles; Consulting Member of Staffs of Huntington Memorial Hospital, Glendale Sanitarium and Hospital, Glendale Hospital, Glendale Sanitarium and Hospital, Glendale Memorial Hospital, and Temple Hospital, Los Angeles; Consultant: Boyle & Company; Truesdail Laboratories; and Thomas J. Haley, Ph.D., Research Pharmacologist; Chief, Division of Pharmacology and Toxicology, Laboratory of Nuclear Medicine and Radiation Biology, University of California, Los Angeles. Lea & Febiger, Philadelphia, 1964. 661 pages, \$9.50.

This is the fourth edition of a well-known text on clinical toxicology. Its sections are listed according to the site of action of certain of the poisons. For instance, there are sections on convulsive poisons; central nervous system depressants; peripherally acting nerve poisons; muscle, protoplasmic and blood poisons. In my opinion, the book would be very useful for a detailed account of the action of poisons when they are identified. Under each poison listed, there is a consideration of the toxic dose, the etiology, the symptoms and actions, duration, pathology, causes of death and short sections on treatment.

The last section of the book which occupies approximately half of its total volume concerns itself with the chemical diagnosis of poisons including essential equipment, separation of poisons by chemical testing and analyses, microcrystalline tests and other more complex means of identifying poisons.

The book cannot be construed as a manual for the emergency treatment of the common poisons but rather a manual of toxicology which could be used as a reference especially for those physicians who must act on occasion as toxicologists in the absence of specialists in this field. The book might find its use therefore greatest in more isolated areas of practice where proper procedures must be found immediately and in detail and recorded for medical-legal reasons.

FRANK W. NORMAN, M.D.

THE ZYMOGRAM IN CLINICAL MEDICINE—S. H. Lawrence, M.D., Assistant Clinical Professor, Department of Medical Microbiology and Immunology, University of California Medical School, Los Angeles, Calif. Charles California Medical School, Los Angeles, Calif. Charles C Thomas, Publisher, Springfield, Illinois, 1964. 100 pages,

The medical student and the graduate physician currently are being bombarded with a large number of enzymes which perform important bodily functions. Although he may have a speaking familiarity with the enzyme, the physician often has no idea of the origin, method of separation, and the mode of assay of the substance. In addition to these complexities, many new enzymes have crossed the horizon. To perplex an already obfuscated physician, the measurement of isozymes, which are enzyme fractions with similar catalytic properties but with different electrophoretic mobilities, is being applied to diverse clinical problems. In this small book, Dr. Lawrence has reviewed the problems concerning the nomenclature of isozymes and has discussed the methods of measure of many isozymes that are pertinent to problems in clinical medicine. The enzymes which are covered are acid phosphatase, alkaline phosphatase, 5-nucleotidase, amylase, betaglucuronidase, aminopeptidase, ribonuclease, lactic acid dehydrogenase, malic dehydrogenase, isocitric dehydrogenase, alcoholic dehydrogenase, glutamic dehydrogenase, beta-hydroxybutyric dehydrogenase, glucose-60-phosphate dehydrogenase, alpha-glycerophosphate dehydrogenase, succinic dehydrogenase, alpha-hydroxybutyric dehydrogenase, cytochrome oxidase, peroxidases, haptoglobin-hemoglobin oxidase, catalase, tyrosinase, ceruloplasmin, monoamine oxidase, transaminases, and lipoprotein associated enzymes. Sprinkled throughout the book are interesting clinical interpretations of the significance of some of the isozyme values. The appendix contains useful information of detailed instructions for many of the various biochemical procedures. This book is recommended to all physicians as it points in the direction of things to come for laboratory diagnoses.

B. J. HAVERBACK, M.D.

SIGNS AND SYMPTOMS—Applied Pathologic Physiology and Clinical Interpretation—Fourth Edition—Edited by Cyril Mitchell MacBryde, A.B., M.D., F.A.C.P., Asso-ciate Professor of Clinical Medicine, Washington University School of Medicine; Assistant Physician, The Barnes Hospital; Director, Metabolism and Endocrine Clinics, Washington University Clinics, St. Louis, Missouri. J. B. Lippincott Company, Philadelphia and Montreal, 1964. 971 pages, \$14.00.

In the words of the editor, a basic philosophy of this book is to emphasize the ". . . processes which result in manifestations of the disabilities and derangements of disease." The 31 contributors have done this very well.

At a time when the advancement of scientific knowledge which is applicable to medicine is rapid and frequently dramatic, the practicing physician becomes increasingly aware of the value—even the necessity—of understanding

the reasons for signs and symptoms rather than to be content with knowing that they exist. Recognizing that truth is not always easy to discover and that the quantity and quality of dependable evidences which have clinical applications produce changing patterns, the authors present the material in a manner which identifies precise methods by which they can be evaluated with accuracy and for definitive purposes.

The entire book is a valuable text and reference for medical students and for practicing physicians, whether they be general practitioners or specialists. Certain chapters are mentioned here as examples for the purpose of emphasizing this point. Those which cover the symptoms of pain or anesthesia are worth the price of the book. How does one evaluate pain quantitatively and qualitatively and by what formulae does he apply it to the diagnosis of disease? These chapters give sound advice on this subject.

The revised chapter on headache by the late Harold Wolff is a classic with which all physicians should be acquainted. The one which covers the common symptoms of nervousness and fatigue has unusual practical applications. In that a large proportion of patients have cardiorespiratory diseases, how does one suspect early cases and those which present equivocal signs and symptoms? What are the signs and symptoms which suggest abnormalities in nutrition and metabolism? Particularly, what are the evidences of imbalances in fluid and electrolytes? These are only a few of the questions which are answered within the respective chapters of the book.

Many books have been written for the purpose of relating pathologic physiology to clinical medicine but few if any have done it as well as this one.

SYNOPSIS OF PATHOLOGY—Sixth Edition—W. A. D. Anderson, M.A., M.D., F.A.C.P., F.C.A.P., Professor of Pathology, University of Miami School of Medicine, Coral Gables, Florida; Director of Pathology Laboratories, son Memorial Hospital, Miami, Florida. The C. V. Mosby Company, Saint Louis, 1964. 883 pages, \$9.75.

Dr. Anderson has again in this sixth edition of his wellknown handbook demonstrated that it is possible to summarize and organize the vast body of information comprising "pathology" into a synopsis which is something more than a mere quiz compendium.

The arrangement of this present edition is as previously and is the classical one of considering basic pathologic changes, such as inflammation and disturbances of circulation, followed by a discussion of specific infectious disease and disturbances of growth and nutrition, before systemic pathology arranged by organ systems is presented. A number of well organized and well thought out tables convey much information with great saving of space. Of course, there can never be unanimity as to what to include or omit in a work of this type but in general the selection has been made wisely and a surprising number of topics are covered very succinctly. Revision appears to be as current as is possible in a textbook.

The small size $(4\frac{1}{2}" \times 7\frac{1}{4}")$ makes for convenient handling, the paper is of excellent quality, and the illustrations are well reproduced. This small book will be particularly useful to the clinician who must refresh his memory and reorient himself prior to examination for certification. The book continues to be popular with medical students but should be used by this group in conjunction with a more detailed reference text. Dental students and workers in the basic and nonclinical medical sciences will find it a helpful and readily understandable source of information. Certainly, many pathologists keep a copy at hand for quick review and easy reference.

RICHARD O. MYERS, M.D.

POSITIONING IN RADIOGRAPHY—Eighth Edition— K. C. Clark, M.B.E. Grune & Stratton, Inc., New York and London, 1964. 806 pages, \$35.00.

Approximately two years have elapsed since the publication of the last edition of this internationally accepted standard of radiographic technique. New positions and new methods have been added. New contrast agents are duly noted. Improved methods of cineradiography, macroradiography and microradiography are considered. The work is exhaustive, beautifully illustrated and well indexed. It is a pleasure to recommend it to radiologists and other clinicians interested in the highest quality of modern radiography.

L. H. GARLAND, M.D.

ADVANCES IN BIOLOGY OF SKIN - Vol. 5 - Wound Healing—edited by William Montagna, University of Oregon Medical School, Portland, Oregon; Oregon Regional rimate Research Center, Beaverton, Ore.; and Rupert E. Billingham, Department of Anatomy, The Wistar Institute, Philadelphia, Pa. (Proceedings of the Brown University Symposium on the Biology of Skin, 1963.) A Pergamon Press Book, distributed by The Macmillan Company, New York, 1964. 254 pages, \$15.00.

The most recent addition to the series, Advances in Biology of Skin, makes exciting reading for all who are interested in the biology of wound healing. Studies in wound healing rank among the oldest problems in medicine. Although treatises on this subject are numerous, they are usually entirely descriptive and lack information concerning the nature of the healing process itself. In recent years there has been an increasing awareness of the problems involved and an accompanying revitalization of research efforts in the field.

In accordance with this new emphasis, contributors to this volume have virtually ignored the surgical aspects of wound repair and have concentrated on experiments designed to answer certain basic questions concerned with the origin, turnover and behavior of various tissue components following different kinds of injury. To this end a variety of studies have been described in which precise quantitative as well as qualitative answers were sought through the use of current isotope tracer techniques, tissue culture, electron microscope methods and other modern research tools.

Although studies on mammalian skin occupy the major space in this volume, a considerable amount of attention has been paid to other organs such as the cornea, hamster cheek pouch, esophagus and the specialized integument enveloping the deer antler, emphasizing the fact that 'wound healing" is not necessarily "skin healing."

Equal time is devoted to consideration of epithelial and stromal problems. A. E. Needham has considered the evolutionary aspects of the problem. C. P. Lebond and his coworkers, as well as others, have dealt with the relationship of epithelial cell formation and cell migration. Several authors have considered the origin, synthesis and evolution of fibrous tissue in repair and the regeneration and repair of blood vessels in wounds.

Perhaps the most provocative chapter was written by Michael Abercrombie who has thoughtfully discussed some of the possible reactions between cells which may guide the process of healing skin. In outlining the various problems of initiation and control of cell movement, mobilization, relationships between cell movement and mitosis, limitation of population increase and other problems, Dr. Abercrombie has described the enormity of the problems at hand; the limits of our present knowledge and the complex interrelationships of cells and stroma and x-factors which must be defined before true understanding of the healing process can be achieved.